

# Science Curriculum Pathway

Secondary School



Living things and their habitats



Describe and classify living things and give reasons.

All living things, evolution & inheritance/ Animals including humans



Human circulatory system including functions of the heart, blood vessels and blood. Recognise impact of diet, exercise and drugs on bodies. Transportation of water and nutrients. Living things have changed over time, variation, adaptation.

Light and how we see things/ Electricitv & circuits



Recognise light travels in straight lines, reflection, shadows and their shape. Associate brightness of lamps/sound of buzzer with number and voltage of cells. Use recognised symbols in drawing circuits.

Year 6

Animals, including humans (changes/growth)/ Properties and changes of materials.



Changes as humans develop into old age (including puberty). Compare and group materials based on their properties, understanding of different materials, reversible and irreversible changes.

Forces/ Living things and their habitats



Understand the concepts of gravity, air resistance, water resistance and friction. Investigate mechanisms and their effect. Life cycles and reproduction of different creatures (mammal, amphibian, insect ad birds)

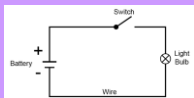
Earth & Space



Describe the movement of the Earth and other planets in relation to the solar system. Movement of the moon. Understanding of shape and relative size. Understanding of night and day.

Year 5

Living things and their habitats/ Electricity



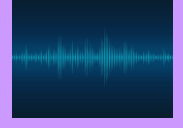
Grouping living things using classification keys. Recognise environments can change. Electrical appliances, simple circuits, conductors and insulators.

Scientists and Inventors/ States of matter



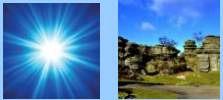
Investigating the work of Bell, Edison, Latimer, Durrell in relation to science already learned. Compare and group materials into solids, liquids and gases. Observe changes. Water cycle.

Animals including humans/ Sound



Describe simple functions of the digestive system. Identify teeth and their functions. Construct a variety of food chains. How sounds are made, including vibrations, find links between pitch and object, and volume and vibrations. How sound gets fainter further away.

Light/ Rocks



Need for light, dark is absence, reflection, sun safety, shadows. Compare and group rocks. Soil make up.

Fossils/ Plants



Revise how rocks are made. Describe how fossils are formed. Identify functions of flowering plants. What plants need to thrive, how water is transported. Plant lifecycles.

Animals & Nutrition/ Forces



How animals, including humans need the right types and amounts of nutrition. Skeletons and muscles. How objects move, magnetic forces attract or repel. Materials attracting. Poles of a magnet.

Year 4

Growing Plants/ Healthy Animals



Observe and describe how seeds and bulbs grow into plants. Describe what a plant needs to grow. Notice that animals have babies which grow to adulthood. Investigate basic needs and importance for humans.

Animal Habitats



Exploring differences between living, dead and never alive. Discover different habitats and basic needs. Identify different plants and animals in their habitats. Food chains.

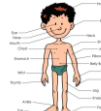
Year 3

Changes in Winter and Spring Changes



Weather and changes from autumn to winter and winter to spring.

Plants/ Animals including humans



Identifying and naming wild and garden plants and understand the basic structure of a variety. Identify and name common animals and characteristics. Structure of animals and name and identify and label parts of the human body

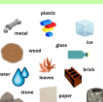
Materials



Identify and compare suitability of everyday materials. Discover how to change materials. Testing and investigating different types of materials.

Year 2

Materials /Changes in Autumn



Identify materials and which objects made from. Describe properties of materials and group/compare. Weather and changes from summer to autumn.

Seasonal changes – spring and summer. Young animals and habitats.



Changes in local area. Life cycles and naming young animals. Hot region habitats.

Year 1

Seasonal changes in winter and spring. Self-care. Environments



Looking at changes in plants/trees/shrubs. Self-care. Cold region habitats.

Autumn – seasonal changes



Looking at plants/trees/shrubs and changes. Weather. Hibernation/migration.

EYFS